* 1. **Perpendicular Bisectors**

Name:\_\_\_\_\_\_\_\_\_\_\_\_ Date:\_\_\_\_\_\_\_\_\_\_\_\_

**Lesson Focus: Mathletes will be able to identify, describe and draw Perpendicular Bisectors**

**Some Vocabulary to help you:**

* Bisect:
  + *Bi* means “two.” *Sect* means “cut.” So, Bisect means to cut in two.

*There are many ways to cut things into two. In my foods class I see some creative cutting (not always equal pieces being cut). Draw some ways that a line segment can be cut into two pieces. Circle the example that has two equal pieces .*

* Perpendicular bisector
  + A line that divides a line segment in half and is at right angles (90°) to the line segment.
  + Equal line segments are marked with “hash” marks

*How are perpendicular bisectors different from just any bisection?*

Look at this nice perpendicular bisection!!!!! Oooooooh Aaaaaaah!

**Some ways to create a perpendicular bisector:**

**Using a compass (p. 90)**

[**http://www.mathopenref.com/constbisectline.html**](http://www.mathopenref.com/constbisectline.html)

1. Draw line segment and label AB
2. Open compass to more than half of the line and make an arc from point A
3. Repeat at point B
4. Find arc intersection and draw a perpendicular line to center of line segment

**Using a ruler and a right triangle (p. 91)**

1. Draw Line segment AB
2. Measure half way across line segement
3. Use right triangle to draw perpendicular line at center of line segment AB

**Using paper folding (p. 91)**

1. Draw a line segment and label it AB
2. Fold the paper so A lies on point B
3. Crease along the fold and open paper. The fold is the perpendicular bisector.

**Need more practice? Try:**

* **P. 92, # 1-5, 8**
  + **Still Good? # 6, 7, 9, MathLink**
  + **ProStar? #10**